

Title (en)

Refractory compositions based on fusion-cast basic oxide grains, and refractory articles made from these compositions.

Title (de)

Feuerfeste Zusammensetzungen auf der Basis von Schmelzgegossenen basischen Oxidkörnern und feuerfeste Körper hergestellt mit diesen Zusammensetzungen.

Title (fr)

Compositions réfractaires non façonnées à base de grains d'oxydes basiques fondus et coulés, et articles réfractaires fabriqués à partir de ces compositions.

Publication

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Application

EP 84402476 A 19841203

Priority

FR 8320270 A 19831219

Abstract (en)

1. An unshaped refractory composition useful for making refractory articles or parts to be used for casting or treating metals, characterized in that it comprises, by weight : a) 49 to 99% of particles having a size from 0.2 μ m to 20 mm of a fused cast refractory material having the following chemical composition by weight : 45-78% MgO, 0-30% Cr₂O₃, 0-35% Al₂O₃, 0-17% FeO and/or Fe₂O₃, with at least 82% of MgO+Cr₂O₃+Al₂O₃+FeO+Fe₂O₃, 1-8% SiO₂, 0-2% CaO+BaO+SrO, 0-10% TiO₂, 0-3% fluorine, with the condition that the quantity of particles of a size below 45 μ m does not exceed 30% by weight, b) 0.5 to 5% of a hydraulic binder, c) 0.5 to 15% of substantially spherical particles chosen from the group consisting of (i) up to 5% of vitreous silica, in which at least 80% of the particles have a size greater than 0.2 μ m and at least 95% of the particles have a size below 10 μ m, (ii) up to 15% of chromium oxide Cr₂O₃ in which at least 80% of the particles have a size above 0.2 μ m and at least 95% of the particles have a size below 10 μ m, and (iii) mixtures of these, d) 0 to 50% of particles chosen from chromite, magnesia and their mixtures, the size of these particles being between 10 μ m and 2 mm, e) 0.01 to 1% of a surface-active agent relative to the total weight of the components (a) to (d), and f) 0 to 4% of metal fasteners relative to the total weight of the components (a) to (d).

Abstract (fr)

L'invention se rapporte aux matériaux réfractaires. Elle concerne une composition réfractaire non façonnée, qui comprend, en poids, (a) 49-99% de particules d'un matériau réfractaire fondu et coulé dont la composition est: 45-78% MgO, 0-30% Cr₂O₃, 0-35% Al₂O₃, 0-17% FeO et/ou Fe₂O₃ avec au moins 82% de MgO + Cr₂O₃ + Al₂O₃ + FeO + Fe₂O₃, 1-8% SiO₂, 0-2% CaO + BaO + SrO, 0-10% TiO₂ et 0-3% F; (b) 0,5-5% d'un liant hydraulique; (c) 0,5-15% de silice vitreuse et/ou de Cr₂O₃ finement divisé; (d) 0-50% de grains de chromite et/ou magnésie; (e) 0,01-1% d'un agent tensio-actif; et (f) 0-4% d'agrafes métalliques. Utilisation notamment en sidérurgie pour la fabrication de chenaux de coulée de l'acier.

IPC 1-7

C04B 35/04; **C21B 7/14**

IPC 8 full level

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CPC (source: EP)

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Cited by

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